



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,906	12/14/2001	Andrew I. Hickson	GB920010074US1	9630
46320	7590	08/31/2006	EXAMINER	
CAREY, RODRIGUEZ, GREENBERG & PAUL, LLP STEVEN M. GREENBERG 1300 CORPORATE CENTER WAY SUITE 105G WELLINGTON, FL 33414			WALSH, JOHN B	
		ART UNIT	PAPER NUMBER	
		2151		

DATE MAILED: 08/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/016,906	HICKSON ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	John B. Walsh	2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 27 June 2006.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 2-16,18-21 and 23 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 2-16,18-21 and 23 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date. _____.   |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____.                                   |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 2-16, 18-21 and 23 rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,633,630 to Owens et al.

As concerns claims 2 and 23, a method of communication in a publish/subscribe environment in which publisher programs send messages to subscriber programs via one or more message brokering systems, the method comprising the following steps: responsive to receipt of a published message at a message broker (34), referring to characteristics of the received message and subscriber-specified quality of service requirements to determine an appropriate quality or service for onward transmission of the message (column 10, lines 1-8; column 7, lines 4-5; abstract lines 10-18); selecting a communication protocol in accordance with the determined quality of service (column 9, line 61-column 10, line 1; column 2, lines 24-27); and transmitting the message using the selected communication protocol (column 9, line 61- column 10, line 8); the subscribe-specified quality of service requirements include an indication of whether transactional message delivery is required, and wherein the protocol selecting step comprises selecting a transactional communication protocol at least for

transactional messages which match subscriptions including said transactional message delivery requirement (column 9, line 61- column 10, line 8; column 10, line 40; column 11, line 66).

As concerns claim 3, a method of communication in a publish/subscribe environment in which publisher programs send messages to subscriber programs via one or more message brokering systems, the method comprising the following steps: responsive to receipt of a published message at a message broker (34), referring to characteristics of the received message and subscriber-specified quality of service requirements to determine an appropriate quality or service for onward transmission of the message (column 10, lines 1-8; column 7, lines 4-5; abstract lines 10-18); selecting a communication protocol in accordance with the determined quality of service (column 9, line 61-column 10, line 1; column 2, lines 24-27); and transmitting the message using the selected communication protocol (column 9, line 61- column 10, line 8); the subscribe-specified quality of service requirements include an indication of whether transactional message delivery is required, and wherein the protocol selecting step comprises selecting a non-transactional communications protocol for messages for which matching subscriptions do not include said transactional message delivery requirement (column 10, lines 28-34).

As concerns claim 4, the protocol selecting step comprises selecting a non-transactional communications protocol for any messages marked as non-persistent and for any messages for which matching subscriptions do not include said transactional message delivery requirement (column 9, line 61- column 10, line 8).

As concerns claims 5, 18, 20 and 21, a method of communication in a publish/subscribe environment in which publisher programs send messages to subscriber programs via one or more message brokering systems, the method comprising the following steps: responsive to receipt of a published message at a message broker (34), referring to characteristics of the received message and subscriber-specified quality of service requirements to determine an appropriate quality of service for onward transmission of the message (column 10, lines 1-8; column 7, lines 4-5; abstract lines 10-18); selecting a communication protocol in accordance with the determined quality of service (column 9, line 61-column 10, line 1; column 2, lines 24-27); and transmitting the message using the selected communication protocol (column 9, line 61- column 10, line 8); for communication between first and second message brokering systems in a multi-broker network, the first message brokering system is configured to access a repository (column 6, line 7) storing subscriber-specified quality of service requirements for subscriber programs which connect to the broker network/currently connected via the second message brokering system, and wherein the first message brokering system determines a quality of service for the communication by referring to the subscriber-specified quality of service requirements for the subscriber programs which connect/currently connected subset to the broker network via the second message brokering system (column 5, line 60-column 6, line 13).

As concerns claims 6 and 21, wherein the second brokering system sends to the repository aggregate quality of service requirements for the set of subscriber programs which connect to the broker network via the second message brokering system (column 6, lines 4-10).

Art Unit: 2151

As concerns claim 7, wherein each brokering system in a multi-broker network sends to its connected message brokering system aggregate quality of service requirements for the set of subscriber programs which are accessible via the brokering system (column 6, lines 4-10).

As concerns claim 8, wherein the second brokering system sends to the repository subscriber-specific quality of service requirements for each subscriber program which connects to the broker network via the second message brokering system (column 6, lines 4-10).

As concerns claim 9, wherein the second brokering system sends to the repository separate quality of service requirements for each of a plurality of different topics or topic groups (column 6, lines 4-10).

As concerns claim 10, the subscribe-specified quality of service requirements include an indication of whether transactional message delivery is required, and wherein the protocol selecting step comprises selecting a non-transactional communications protocol for messages for which matching subscriptions do not include said transactional message delivery requirement (column 10, lines 28-34).

As concerns claims 11 and 19, selecting a non-transactional communications protocol for messages for which matching subscriptions do not include said transactional message delivery requirement (column 10, lines 28-34).

As concerns claims 12 and 16, including applying one or more override policy rules to determine whether to override a specified quality of service when no communication connections are available which provide the specified quality of service (column 10, lines 3-8; no connections available by that provider that will not be listed, thereby overriding the previous list of available connections).

As concerns claim 13, wherein the override policy rules are message topic specific (column 11, lines 65-67).

As concerns claim 14, the override policy rules are subscriber specific (column 10, line 60).

As concerns claims 15 and 23, wherein the first and second message brokering systems are configured for establishing a plurality of communication connections there between, each connection providing a different quality of service (~~different based on rules and options established by the user~~), and wherein the selection of a communication protocol by the first message brokering system includes determining which of the plurality of connections are currently available for sending a message to the second brokering system and selecting a communication protocol provided by a currently available connection in accordance with the determined quality of service (column 10, lines 3-8).

***Response to Arguments***

3. Applicant's arguments filed June 27, 2006 have been fully considered but they are not persuasive.

The applicant has argued Owens does not disclose a "message broker", since the receiver 34 of Owens cannot be a message broker. The examiner disagrees since the term "broker" has been given the broadest reasonable interpretation, wherein the term "broker" relates to an intermediary such as a stockbroker, who buys or sells stocks. In the current instance a "message broker" would be a broker, which sends or receives messages. A receiver of Owens receives messages, and is therefore a "message broker".

Art Unit: 2151

The applicant has argued Owens does not disclose “subscriber-specified quality of service requirements”. A sender or user, as defined by Owens, can be a subscriber. The users, senders and receivers can choose from a variety of filter and forward options, thus satisfying “specified quality of service requirements”. The applicant has not claimed the particular “quality of service requirements” only that it includes “an indication of whether transactional message delivery is required”, which is disclosed by Owens (see rejection above).

The applicant has argued Owens does not disclose, “selecting a communication protocol in accordance with the determined quality of service”. The examiner disagrees since Owens discloses the relation between “quality of service” desired by sender/receiver and the mode, which inherently has a protocol associated with it.

### ***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

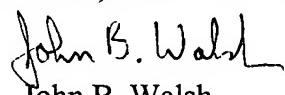
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2151

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John B. Walsh whose telephone number is 571-272-7063. The examiner can normally be reached on Monday-Wednesday from 5:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on 571-272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
John B. Walsh  
Primary Examiner  
Art Unit 2151